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Indiana Population Projections
to the Year 2020

Robert A. Calhoun

Introduction

Joel C. Webster

Methodology

Morton J. Marcus

Summary of the Results

Indiana Population Projections to the Year 2020

In this issue

Perhaps no other single research activity undertaken by the Division of Research is as important as projecting population. Businesses and governments alike use these projections to make capital investment decisions about Indiana which shape the state's future for decades. They can advance prosperity or retard it. To the extent that projections of population are influential, they deserve the most careful attention.

In this issue the results of 27 months of careful research are reported. Detailed examinations of the births, deaths, and migration of 19 different age groups and both sexes for each county lie behind the results published here.

These pages explain, in brief, the methods used to make these projections. Some of the findings are summarized here; the more detailed, formal publication is available from the Board of Health. Persons or agencies requiring more detail should contact the State Board of Health for the volume, *Indiana County Population Projections, 1985-2020*.

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Introduction, Robert A. Calhoun, Director of Public Health Statistics, Indiana State Board of Health

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Introduction

This is the fourth major population projection series developed by the School of Business in the past 20 years. The first, in 1966, was produced for the Indiana Department of Commerce; the other three (in 1976, 1978, and 1983) are part of a continuing, cooperative projections program with the State Board of Health.

As was the case with the previous three efforts, this 1983 series is demographic in nature, in that it is based on the fertility, mortality, and migration experiences of residents of Indiana and its counties. Thus it reflects what may be expected to happen to our population if fertility, mortality, and migration remain essentially the same. This, of course, may not be what happens.

For the past 25 years, Indiana's population has declined, primarily because of lower fertility, but also because of a switch from net immigration to net outmigration. This has been reflected in the projected populations for 1985 and 2000:

	1985	2000
1966 Series	6,268,200*	No projection
1976 Series	5,828,600	6,582,100
1978 Series	5,584,700	6,061,000
1983 Series	5,568,000	5,855,500

*Lowest of 3 projections made in 1966 Series.

No projections beyond 2000 were made in the previous series, but the new figures show growth after 2000 to be decelerating, basically because of an aging population. As the median age increases from 29 in 1980 to 38 in 2020, fewer

births and more deaths can be anticipated, resulting in lower natural increase (births minus deaths). This phenomenon is not peculiar to Indiana; natural increase in the United States is expected to reach zero before the middle of the next century.

Other highlights of the new series include:

- An Indiana growth rate from 1980 to 2020 of 11.1 percent (less than half the anticipated national growth rate of 29 percent);

- A sharp decline in the population under 20;

- Major increases in population over 40, and specifically that over 65;

- Little change in the population of central metropolitan counties;

- Continued rapid, but slowing, growth in suburban counties;

- Slow growth in the rural areas, continuing the pattern developed in the '70s after a century or more of decline.

No series of projections can be expected to depict the future exactly. Projections merely continue past trends into the future, modified, albeit slightly, by the judgment of the researchers. These projections are offered as a starting point for planning rather than as a statement of conclusions. Actions taken in the next few years by individuals, corporations, and governments will change the course of the future. Still, we may expect that the general outlines of the future will resemble those depicted in these pages because population dynamics do take long periods of time to alter course.

These projections are single-valued rather than a range of alternative assumptions. The investigators did consider many alternatives and together concluded that the most useful set would be that described by the methodology presented in the following section. We are prepared to investigate alternative assumptions and to reexamine the data for individual counties where convincing arguments can be developed. We will be doing just that in the years ahead in an effort to improve the work presented here.

Methodology Used to Project Population

There are two primary approaches to population projections: the econometric and the demographic. In the first, some simulation model of the economy might be used to project factors, such as employment and income, which are thought to affect both migration and birth rates. From those factors it is therefore possible to derive some information regarding possible future populations. This approach contrasts with the demographic, which directly utilizes patterns of birth, death, and migration to project population. Although the econometric approach may be more comprehensive than the demographic approach, it is more complex and has not yet equalled the demographic approach in long-term forecasts. Since the 1983 IU/SBH series is a long-term forecast, a demographic approach was selected.

Within the demographic approach, one of two primary methods can be selected to predict population: forecasting and projecting. In a forecast, extensive judgmental changes are applied to the current patterns of population growth or decline. These judgments may incorporate possible economic, social, or environmental factors which have not yet been reflected in historic population patterns. For example, an expert might be convinced that the ice caps will melt in 1999. Although this has not happened in the recent historical past, it would have significant impact on patterns of birth, death, and, particularly, migration. The forecasting approach is more flexible than the projection method and could prove more accurate, provided that the judgment of the expert is also accurate. Unfortunately, the more judgmental decisions such a model requires, the more certain it is that some will be wrong. A projection method is more strictly linked to the patterns of the past, and only those changes in the economy, society, or environment which have already made themselves felt in measured demographic changes apply to the projections. It was this method which was selected for the 1983 IU/SBH projections.

The essential method by which a demographic approach projects population is quite simple. It can be expressed as the following equation:

$$\text{POP}(\text{new}) = \text{POP}(\text{old}) + \text{births} - \text{deaths} + \text{immigration} - \text{outmigration}$$

where POP(new) is the new base population and POP(old) is the population of the earlier projection period. In the IU/SBH projections, the population is divided into 3496 pieces (or cohorts): 92 counties, each with 2 sexes (male, female), classified into 19 age categories. The printed version showed only 18 age categories, one for those 0 to 4 years old, one for each five-year age increment to age 84, and then one category called 85+. The projection model itself used 19 age categories. The age 0 to 4 was divided into two categories, age 0 (under 1 year old) and age 1 to 4. This was to take into account the very wide difference in mortality rates between children under 1 year and older children. Each of these cohorts was computed independently, and then summed to get county totals.

This equation became even simpler due to the lack of information regarding migration flows. Although no information existed which provided immigration rates and outmigration rates for each cohort, it is possible to compute a value of net migration (the difference between immigration and outmigration for a cohort). This is because birth and death data as well as census population counts are available. Net migration is theoretically equal to the following equation:

$$\text{Net Migration} = (\text{POP}(\text{old}) + \text{births} - \text{deaths}) - \text{POP}(\text{new})$$

where POP(new) is the 1980 census count, POP(old) is the 1970 census count, births is the number of births between 1970 and 1980 (April 1 of those years) and deaths is the number of deaths for that intercensal period. Dealing with individual cohorts is somewhat more complex than this. First, the 1970 population has aged 10 years during that period. Second, births will

increase population only in the ages 0 to 9 years. Third, deaths vary greatly from cohort to cohort.

In the IU/SBH projections, five-year rates of fertility, mortality, and net migration were computed for each of the 3496 cohorts and then applied to the 1980 base population obtained from the census. The resulting distribution of population then became the base population for the next five-year projection. This was repeated eight times, thereby projecting population to the year 2020. Some modifications were made to the net migration figures due to known anomalies in the 1970 census. These are described below. Nevertheless, the basic projection process was a simple simulation of the process we have described.

Although the 1983 IU/SBH series was intended to be a conservative projection set rather than a forecasting or scenario approach, it is impossible to avoid making assumptions about the future. A projection assumes that there will be neither cataclysms nor bonanzas during the period of projection. The following assumptions were made for the period 1980 to 2020:

- Death rates by age, sex, and county will remain identical to the 1979-1981 rates. (It is true that mortality for a particular cohort during 1979-1981 tended to be lower than mortality for that cohort during any other period of history. However, that decrease is the result of a fairly steady decline in mortality rates for several decades.) The steady-state assumption was chosen for two reasons: (1) simplicity, and (2) because mortality rates have been leveling off in the industrialized nations of Western Europe, which tend to lead the United States slightly in this respect.

If mortality rises back toward rates seen before this period (perhaps due to declining levels of health care or environmental degradation), then the population of Indiana would be smaller in number and younger in age than the projection series would indicate. If mortality rates continue to drop from the 1979-1981 levels (perhaps due to greater concern with good

health or advancing medical technology) then the population of Indiana would be larger but older than this projection series indicates.

• Birth rates by age of mother, sex of child, and county will remain identical to the rates seen in the 1979-1981 period.

Fertility rates in the 1979-1981 period were at historical lows. In terms of lifetime fertility, the average female in 1979-1981 could be expected to have about 1.9 children over her lifetime. In 1957, the year of peak fertility, the average female was expected to have about 3.9 children during her lifetime.

If fertility continues to drop from the 1979-1981 rates, the population in Indiana will be substantially smaller and older in 2020. If fertility should rise again, population in Indiana will be much larger and younger than projected in the current series. A multiplying effect occurs with regard to projected changes in fertility, as the projections are over a long enough period that children yet unborn reach childbearing age themselves well before the projections terminate.

The constant rate assumption was selected for the following reasons: (1) simplicity and (2) compatibility with most national projections which usually assume either steady rates or a very slight additional decline.

• Enrollment by age and sex will remain constant at Indiana University at Bloomington, Purdue University at West Lafayette, Ball State University at Muncie, and Indiana State University at Terre Haute.

This assumption was necessary; long-term enrollment projections were not available and large institutional populations have profound effects on the county in which they are located. Such institutions were therefore treated separately from the counties in which they are located and only added in at the end of each projection period. This assumption can also be justified if one believes that the major state educational institutions will draw additional enrollment either from smaller institutions or by different admission proce-

dures or educational programs which tap a larger segment of the population.

• Migration rates are based on the 1970 to 1980 experience. The simple theoretical method described above was inadequate for several reasons. The most important was that methodology improved between the two censuses, which caused an additional five million people to be counted nationally in the 1980 census. The second was known changes in the society in which the censuses were conducted, notably the end of the Vietnam conflict and the corresponding reduction in social unrest, military forces, and civil disobedience. The following changes were applied to that experience:

(a) Migrations were adjusted to account for the male populations involved in the military in 1970. For example, a male in the military in 1970 who was nevertheless located within the United States was counted as being a resident of the state in which he was stationed rather than his home state. Also contained within this adjustment was a probable underreportage of young males of draftable age.

(b) Migrations were adjusted to account for an apparent undercount of student populations in 1970. For example, Indiana University in 1980 had a reported enrollment almost identical to the census count of enrollment. Throughout the '70s, IU enrollment appeared almost constant. However, in 1970 there was a very great discrepancy between the census count and the university count. The university count, however, was fully compatible with the other counts throughout the decade and with the 1980 census. It was therefore decided that the university enrollment counts were actually superior to the 1970 census counts. Therefore, the 1970 census counts for the counties in which such institutions are located were adjusted to eliminate discrepancies between university counts and the census of 1970. This made corresponding changes in migration estimates.

(c) Extreme migration rates for particular cohorts were adjusted to more normal values. A statistical analysis located migra-

tion rates which were more than two standard deviations away from the mean migration rate for that cohort at the state level. These outliers were then moved back to the closest boundary value. This was judged to be necessary for migration but not for births or deaths because of the much larger expected errors in migration rates. Birth records and death records are kept very carefully and it is doubtful if there is a mean error of even 1% in any cohort. The 1980 census was also very precise and it is doubtful if there were any large miscounts for any cohort. The 1970 census had a substantial undercount, perhaps 2% of the population. Net migration is a much smaller value than base population, and *all* the unaccounted-for error transfers to that smaller, residual number. Even if the adjustments described above accounted for 90% of the total undercount, the error, when applied to net migration at the state level, is not .2% but around 10% since the base population is over five million and net outmigration was around 100,000. When such possible inaccuracies are applied to individual cohorts in specific counties, the potential for misleading migration rates is very high unless extreme values are controlled.

(d) Cohorts with net outmigration would continue to migrate outward at 1970-80 rates, but cohorts with net immigration would experience reduced rates of immigration. Specifically, during the 1980-1985 projection period, cohorts with net immigration have rates only .6 of those calculated for the 1970-1980 period applied to them. This decision was a consequence of one fact and one speculation. First, although unadjusted migration rates gave net outmigration rates of about 55,000 for the state during the period 1980-1985, preliminary census estimates of migration indicated that 107,000 people on balance left the state in just the period 1980-1982. To make the projections generally compatible with this result required that migration rates be adjusted somehow so as to increase the net outmigration for the state as a whole. In general, this could be done by raising outmigration rates but

leaving immigration unchanged, raising out-migration a lesser amount and dropping immigration, or leaving outmigration unchanged but dropping immigration rates substantially. After much thought and analyses of all these possibilities, we decided to select the third. We speculated that moving is a difficult decision and that the number of people (total) who move will not appreciably increase during periods of economic stress. However, among the people who do decide to move, such stress results more often in moving out of the state altogether rather than relocating within the state. When applied to net rates for individual cohorts, this would have the effect of making outmigration rates a little higher but immigration rates substantially lower.

(e) The difference between immigrations and outmigrations mentioned in (c) will disappear by 2000. It was decided that it would be unduly pessimistic to assume that the conditions seen in Indiana in the period 1978-1982 would persist indefinitely. If the economic stress in the state became less, the reduced immigration rates would again tend to approximate the 1970-1980 pattern relative to outmigration rates.

(f) Both immigration rates and out-migration rates would decline over the projection period to a value only 1/64th of the 1980-85 rates in the 2015-2020 projection.

This is due to two reasons: (1) since migration rates were the demographic component about which great doubt persists, it was reasonable to give it less importance as the projections extended further into the future; and (2) in a situation in which some cohorts have net immigration and others have net outmigration, the relative importance of those cohorts is not constant. Specifically, in each projection period, the cohorts which had net immigration constitute a larger and larger portion of the whole. This effect can compound over several projection periods to yield extraordinarily implausible results. Indeed, if a state had only a single region with overall net immigration and the projection was

extended far enough, that state would eventually show explosive growth, all of which was in that single region.

The regions showing the greatest immigration during the seventies were suburban counties. This was certainly due largely to migration from the adjoining urban counties. When migration rates are left unadjusted and applied mechanically to the appropriate cohorts, the growth in the suburban counties quickly exceeds the outmigration from the urban center by many times. Before the end of the projections, the pattern of population distribution is entirely twisted, with densely populated suburban counties surrounding comparatively empty central counties and those suburban counties growing at astronomical rates. This is clearly unlikely. Such compound interest effects were therefore controlled by fitting migration rates to a declining quadratic curve.

The methodology and assumptions described here are both simple and flexible. Alternatives are clearly possible. These have the advantage of replicating a known past with only modest adjustment for technical reasons. The great value of these assumptions is that they tend to provide projections of a baseline nature. As changes in fertility, mortality, or migration occur, it will be possible to measure the extent of that impact on the population of Indiana with greater clarity than if more "imaginative" approaches had been undertaken here.

Summary of the Results

Indiana's population is projected to increase throughout the next four decades, reaching a total of 6,101,000 in the year 2020. From 1980 to 2020 the state's population will grow by more than 610,000 persons, an 11.1% increase. During the same forty years, the national population has been projected to grow by 29%.

In each decade until 2020, the magnitude of growth as well as the rate of growth is expected to decline. (See Table 1.) Although the state's population grew

Table 1
Indiana's Population
Change for Decade Ending:

	Number	Percent
1910	184,400	7.3
1920	229,500	8.5
1930	308,100	10.5
1940	189,300	5.8
1950	506,900	14.8
1960	727,800	18.5
1970	531,200	11.4
1980	296,500	5.7
1990	183,700	3.3
2000	181,600	3.2
2010	146,700	2.5
2020	98,800	1.6

by 296,500 (5.7%) in the 1970s, the growth for this decade will be only 60% of that, some 183,700. During the next three decades, the number of persons added to the Hoosier population will decline. In sum, the total increase projected for Indiana in the next forty years is less than the 727,800 persons added to the state population in the 1950s. These additions to the population of the state are shown graphically in Figure 1.

If the State of Indiana experienced population change through natural increase alone (an excess of births over deaths), then 910,000 would be added to the state's numbers by the year 2020. But since people are free to move where their interests and opportunities are best served, a net migration of population from Indiana is projected. It will decline over time, but will nonetheless result in a net loss of 301,000 persons, reducing the state's potential growth by one-third. (See Table 2.) An analysis of these data indicates that two-thirds of that net outmigration will occur in this decade. Of the 202,000 net out-migrants in this decade, 111,000 (55%) will be persons age 20 to 29.

The aging of the state's population is shown in Table 3. In 1980 a third of the people of Indiana were under age 20; by the year 2020 less than a quarter of the population will be in this youthful bracket. Where one in five Hoosiers was age 40 to 59 in 1980, the ratio will rise to one in

Table 2
Indiana
Components of Change: 1980-2020

Births	3,182,000
Deaths	-2,272,000
Natural Increase	910,000
Net Migration	-301,000
Change	609,000

Table 3
Indiana:
Age Distribution

Age	1980 Percent	2020 Percent
0-19	33.4	24.9
20-39	31.4	27.4
40-59	20.2	25.2
60-79	12.7	19.4
80 & up	2.3	3.1
Total	100.0	100.0

four. The state will become more middle-aged. The median age of the population will rise from 29.2 to 38.3 years. The number of those under 30 will decline and those older than 30 will increase. In Table 4 the change in population by age is shown, with special attention at the bottom of the table to the group 20 to 39. Some may note that the decline in the number of young persons implies decreasing enrollment in primary and second-

ary schools. Others may find the increase in the numbers 85 and older a matter of concern to nursing homes in the state. Particular attention should be paid to the fact that the greatest numeric increase will occur in the population age 30 to 59, which will grow by 505,000 persons. By the year 1990, all of these persons will have been born. The oldest in that group was 19 years old in 1980. This cohort will pass through our schools and into the labor force during the period of these projections. They will be the ones most subject to the lures and temptations of migration. In fact, if the economic prospects of the state were to improve, it is likely that their numbers would be greater than those shown in Table 4. In addition, if they tend to stay in the Hoosier state, they will have their children here and the decreases shown in the younger age groups will be lessened. Finally, this mature, productive part of the labor force constitutes the growth market of the future. Firms and governments alike with an eye to the future would do well to concentrate attention here on the population born between 1961 and 1990.

The baby boom which followed the Second World War is represented in these numbers in the cohort which will be 60 to 79 in 2020. Here is found the largest percent increase in population. Their well-being, their level of savings, and opportunities will be determined in part by the economic conditions they face in the next

Table 4
Indiana:

Shifts in Age Groups: 1980 to 2020

Age	2020 Number	Change Number	Percent Change From 1980
0-19	1,521,940	-314,340	-17.1
20-39	1,669,530	-55,590	-3.2
40-59	1,536,400	426,720	38.4
60-79	1,184,620	489,950	70.5
80 & up	188,510	63,990	51.4
Total	6,101,000	610,800	11.1
20-29	847,650	-133,870	-13.6
30-39	821,880	78,280	10.5

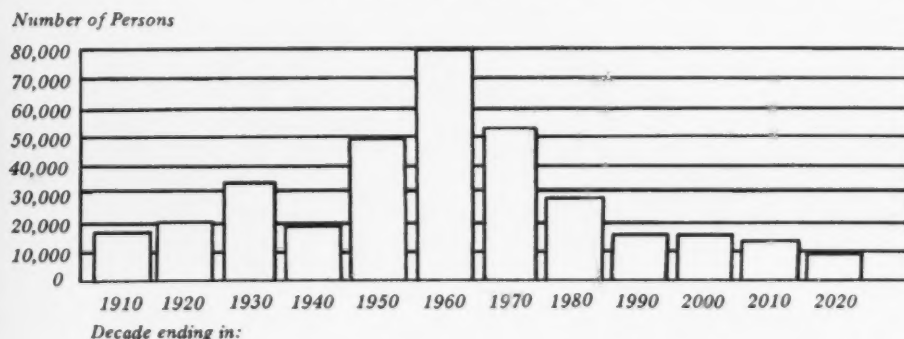
forty years. They can be a strong contribution to a changing Hoosier society as they move from the ages 20 to 39 in 1980 to a mature and potentially secure older age.

County Level Detail

At the county level, the changes in Indiana's population appear even more dramatic because of the wide differences among the 92 counties of the state. (See Table 5.) Marion, Lake, and Allen will still be the three most populous counties in the state, but whereas they had 1,582,600 of the state's 5,490,200 persons (28.8%) in 1980, their share will slip to 26.3% in 2020. Lagrange county will show the greatest percent growth, 73.4%, with Porter having the greatest amount of growth, 71,100 persons. In all, 77 of the state's 92 counties are projected to increase in population, with the remaining 15 declining in numbers. Marion county is projected to have the greatest numeric decline (25,400) with Benton having the largest percentage decline (16.8%).

Figure 2 depicts the percentage changes. The areas of greatest population growth are concentrated in the northeastern and southeastern parts of the state, with other major growth areas in the suburban areas of northwestern, southwestern, and central Indiana. The declines are anticipated primarily in a band along the western edge of the state and in east central parts of the state.

Figure 1
Change in Population of Indiana



"At the county level, the changes in Indiana's population appear even more dramatic because of the wide differences among the 92 counties of the state . . . In all, 77 of the state's 92 counties are projected to increase in population, with the remaining 15 declining in numbers."

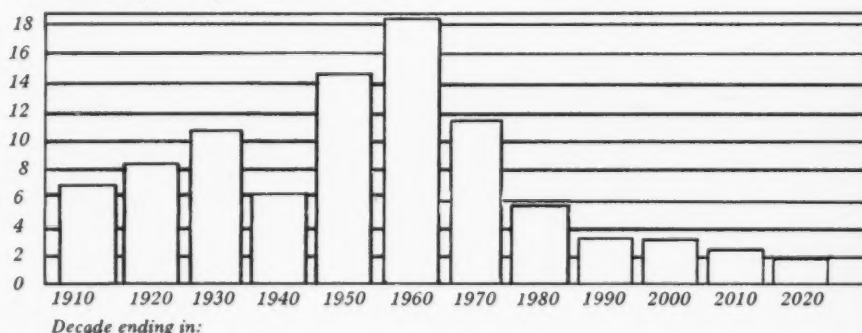
How each county will grow or decline is a function of its fertility, mortality, and migration patterns. Except for Brown and Vermillion, all Indiana counties will experience natural increase (more births than deaths). (See Table 6.) Growth in those two counties will occur, however, as net immigration exceeds the natural decrease in population. In all, 48 Indiana counties are expected to have net immigration as the population within the state is redistributed. Although the state as a whole will have net outmigration, this redistribution within the state will change markets and political power. In 15 counties, including Henry, St. Joseph, and Vigo, net outmigration will be sufficient to overcome the natural increase of population and lead to a decline in the number of persons. In 29 counties, including Cass, Lake, Monroe, and Wabash, natural increase is sufficiently large to offset the net outmigration projected for the population. In Bartholomew, Floyd, Hancock, Kosciusko, and 32 other counties, natural increase is greater than net immigration and is the stronger force in each county's growth. Alternatively, in Crawford, Hamilton, Steuben, Warrick, and 6 other counties, immigration exceeds natural increase and is the leading factor in county population growth.

In Table 7 the percentage distribution by age in each county is reported along with the median age for the years 1980 and 2020. College counties (Monroe and Tippecanoe) tend to have low median ages. Brown county, with a natural decrease in population, has the highest median age in 2020; at that time nearly 23 percent of the population in Brown county will be age 65 and older.

Table 5
Indiana Population

County	Population				Total Change			
	1980		2020					
	Number	Rank	Number	Rank	Number	Rank	Percent	Rank
Adams	29,600	48	42,200	39	12,600	16	42.6	9
Allen	294,400	3	342,400	3	48,000	3	16.3	40
Bartholomew	65,100	21	71,100	21	6,000	31	9.2	57
Benton	10,300	87	8,500	90	-1,800	92	-17.5	92
Blackford	15,500	81	13,800	85	-1,700	81	-11.0	91
Boone	36,400	36	47,600	29	11,200	17	30.8	18
Brown	12,400	85	15,700	82	3,300	49	26.6	23
Carroll	19,700	69	22,700	71	3,000	53	15.2	43
Cass	40,900	30	43,200	36	2,300	57	5.6	65
Clark	88,900	14	105,600	14	16,700	11	18.8	36
Clay	24,900	58	27,000	62	2,100	58	8.4	60
Clinton	31,500	44	32,700	51	1,200	67	3.8	69
Crawford	9,800	88	13,300	86	3,500	47	35.7	12
Daviess	27,800	51	30,300	57	2,500	54	9.0	58
Dearborn	34,300	40	45,300	32	11,000	18	32.1	16
Decatur	23,800	61	26,300	64	2,500	54	10.5	55
Dekalb	33,600	42	40,000	42	6,400	28	19.0	33
Delaware	128,600	8	129,500	11	900	69	.7	76
Dubois	34,200	41	42,100	40	7,900	24	23.1	27
Elkhart	137,300	7	168,100	6	30,800	4	22.4	29
Fayette	28,200	50	31,700	53	3,500	47	12.4	51
Floyd	61,200	22	70,200	23	9,000	23	14.7	44
Fountain	19,000	75	19,600	77	600	72	3.2	71
Franklin	19,600	70	25,700	66	6,100	30	31.1	17
Fulton	19,300	72	23,000	70	3,700	45	19.2	34
Gibson	33,200	43	37,400	46	4,200	41	12.7	48
Grant	80,900	17	72,300	20	-8,600	90	-10.6	90
Greene	30,400	45	34,300	50	3,900	44	12.8	49
Hamilton	82,000	16	132,800	10	50,800	2	62.0	3
Hancock	43,900	26	56,900	26	13,000	14	29.6	19
Harrison	27,300	52	43,800	35	16,500	12	60.4	4
Hendricks	69,800	20	92,400	17	22,600	9	32.4	15
Henry	53,400	24	50,400	27	-3,000	85	-5.6	86
Howard	86,900	15	92,000	18	5,100	34	5.9	63
Huntington	35,600	37	39,300	44	3,700	45	10.4	54
Jackson	36,500	35	42,700	37	6,200	29	17.0	38

Figure 2
Percent Change in Population of Indiana



(Table 5, Indiana Population, continued)

County	1980		2020		Total Change			
	Number	Rank	Number	Rank	Number	Rank	Percent	Rank
Jasper	26,100	55	41,000	41	14,900	13	57.1	6
Jay	23,300	63	23,800	68	500	76	2.1	73
Jefferson	30,400	45	35,300	49	4,900	35	16.1	41
Jennings	22,900	64	27,500	60	4,600	39	20.1	32
Johnson	77,200	18	103,200	15	26,000	7	33.7	13
Knox	41,900	28	39,700	43	-2,200	84	-5.3	85
Kosciusko	59,600	23	89,300	19	29,700	5	49.8	7
Lagrange	25,500	56	44,300	34	18,800	10	73.7	1
Lake	523,000	2	523,800	2	800	71	.2	77
LaPorte	108,700	12	113,500	13	4,800	37	4.4	68
Lawrence	42,500	27	45,700	30	3,200	52	7.5	61
Madison	139,400	6	136,300	8	-3,100	86	-2.2	80
Marion	765,200	1	739,800	1	-25,400	92	-3.3	83
Marshall	39,200	33	48,300	28	9,100	22	23.2	26
Martin	11,000	86	10,700	87	-300	79	-2.7	82
Miami	39,900	31	45,100	33	5,200	33	13.0	47
Monroe	98,800	13	124,000	12	25,200	8	25.5	24
Montgomery	35,500	38	35,900	48	400	77	1.1	75
Morgan	52,000	25	63,000	25	11,000	19	21.2	31
Newton	14,800	82	21,900	73	7,100	26	48.0	8
Noble	35,400	39	45,600	31	10,200	20	28.8	21
Ohio	5,100	92	6,800	92	1,700	61	33.3	14
Orange	18,700	76	20,800	75	2,100	58	11.2	52
Owen	15,900	80	21,600	74	5,700	32	35.8	11
Parke	16,300	79	17,800	79	1,500	64	9.2	59
Perry	19,300	72	19,900	76	600	72	3.1	72
Pike	13,500	83	15,400	83	1,900	60	14.1	45
Porter	119,800	10	190,900	5	71,100	1	59.3	5
Posey	26,400	53	36,200	47	9,800	21	37.1	10
Pulaski	13,200	84	14,900	84	1,700	61	12.9	50
Putnam	29,200	49	29,800	59	600	72	2.1	74
Randolph	30,000	47	31,400	54	1,400	65	4.7	67
Ripley	24,400	60	31,200	55	6,800	27	27.9	22
Rush	19,600	70	17,800	79	-1,800	82	-9.2	89
St. Joseph	241,600	4	236,700	4	-4,900	87	-2.0	79
Scott	20,500	68	23,800	68	3,300	49	16.1	39
Shelby	39,900	31	42,400	38	2,500	54	6.3	62
Spencer	19,300	72	23,900	67	4,600	39	23.8	25
Starke	22,000	65	26,100	65	4,100	43	18.6	37
Steuben	24,700	59	31,900	52	7,200	25	29.1	20
Sullivan	21,100	67	22,300	72	1,200	67	5.7	64
Switzerland	7,100	90	8,700	89	1,600	63	22.5	30
Tippecanoe	121,700	9	134,700	9	13,000	14	10.7	53
Tipton	16,800	78	16,400	81	-400	80	-2.4	81
Union	6,900	91	7,500	91	600	72	8.7	56
Vanderburgh	167,500	5	159,400	7	-8,100	89	-4.8	84
Vermillion	18,200	77	19,100	78	900	69	4.9	66
Vigo	112,400	11	102,000	16	-10,300	91	-9.2	88
Wabash	36,600	34	37,900	45	1,300	66	3.6	70
Warren	8,900	89	8,800	88	-100	78	-1.1	78
Warrick	41,500	29	70,400	22	28,800	6	69.6	2
Washington	22,000	65	26,900	63	4,900	35	22.3	28
Wayne	76,100	19	70,000	24	-6,100	88	-8.0	87
Wells	25,400	57	30,200	57	4,800	37	18.9	35
White	23,800	61	27,100	61	3,300	49	13.9	46
Whitley	26,200	54	30,400	56	4,200	41	16.0	42
Indiana	5,490,200		6,101,000		610,800		11.1	

Additional tables and figures can be generated all too easily from the mass of data in the report on which this summary is based. All of the data in that report are available for use in the Indiana public libraries throughout the state. No amount of analysis and reporting on the data, however, will assure the "accuracy" of the projections. It is the response of the citizens of the state to these projections that determines the future. To the extent that outmigration is reduced or immigration increased, these data will be "proved" false. Individuals with different views of population growth and change will make their own judgments on the desirability of the projected outcomes. If they do not like the projections, they can take actions to make the state's future different from that indicated here. ☐

"How each county will grow or decline is a function of its fertility, mortality, and migration patterns. Except for Brown and Vermillion, all Indiana counties will experience natural increase (more births than deaths) . . . In all, 48 Indiana counties are expected to have net immigration as the population within the state is redistributed. Although the state as a whole will have net outmigration, this redistribution within the state will change markets and political power."

Table 6
Projected Components of Population Change: 1980-2020

County	Births	Deaths	Natural Increase	Net Migration	Total Change
Adams	25,930	11,610	14,310	-1,710	12,600
Allen	184,860	111,960	72,810	-24,810	48,000
Bartholomew	32,870	27,710	5,270	730	6,000
Benton	4,960	4,430	370	-2,170	-1,800
Blackford	7,720	7,270	370	-2,070	-1,700
Boone	23,670	15,890	7,740	3,460	11,200
Brown	5,720	6,180	-430	3,730	3,300
Carroll	11,030	8,560	2,580	420	3,000
Cass	23,140	17,940	5,190	-2,890	2,300
Clark	49,850	38,890	10,830	5,570	16,700
Clay	14,610	12,390	2,170	-70	2,100
Clinton	17,730	14,640	3,070	-1,870	1,200
Crawford	6,550	4,890	1,700	1,800	3,500
Daviess	16,900	13,530	3,400	-900	2,500
Dearborn	23,140	15,270	8,000	3,000	11,000
Decatur	14,520	10,020	4,400	-1,900	2,500
Dekalb	21,370	13,910	7,350	-950	6,400
Delaware	66,890	47,140	19,640	-18,740	900
Dubois	21,890	13,950	7,890	10	7,900
Elkhart	89,000	52,950	36,000	-5,200	30,800
Fayette	16,670	12,060	4,620	-1,120	3,500
Floyd	34,230	26,740	7,740	1,260	9,000
Fountain	9,880	8,960	1,020	-420	600
Franklin	13,220	7,750	5,520	580	6,100
Fulton	11,960	9,590	2,370	1,330	3,700
Gibson	18,740	16,270	2,380	1,820	4,200
Grant	38,100	32,470	5,510	-14,110	-8,600
Greene	16,930	15,970	1,060	2,840	3,900
Hamilton	57,360	35,580	21,780	29,020	50,800
Hancock	25,920	18,880	7,080	5,920	13,000
Harrison	21,710	12,560	9,110	7,390	16,500
Hendricks	40,700	28,390	12,310	10,290	22,600
Henry	24,970	22,680	2,170	-5,170	-3,000
Howard	49,330	35,170	14,070	-8,970	5,100
Huntington	21,740	15,100	6,600	-2,900	3,700
Jackson	22,540	16,330	6,200	0	6,200
Jasper	21,410	11,400	10,050	4,850	14,900
Jay	13,510	10,290	3,200	-2,700	500
Jefferson	16,670	13,690	3,180	1,720	4,900
Jennings	12,950	9,970	3,010	1,590	4,600
Johnson	48,250	33,160	15,140	10,860	26,000
Knox	20,610	20,070	520	-2,720	-2,200
Kosciusko	47,890	26,530	21,350	8,350	29,700
Lagrange	27,840	10,120	17,820	980	18,800
Lake	319,030	198,810	120,080	-119,280	800
LaPorte	59,030	46,010	12,950	-8,150	4,800
Lawrence	22,000	20,590	1,380	1,820	3,200
Madison	70,470	57,770	12,780	-15,880	-3,100

(Table 6, Projected Components of Population Change, continued)

<i>County</i>	<i>Births</i>	<i>Deaths</i>	<i>Natural Increase</i>	<i>Net Migration</i>	<i>Total Change</i>
Marion	411,390	304,440	106,900	-132,300	-25,400
Marshall	26,140	17,770	8,320	780	9,100
Martin	6,080	4,710	1,310	-1,610	-300
Miami	25,530	14,990	10,390	-5,190	5,200
Monroe	60,810	28,740	31,930	-6,730	25,200
Montgomery	16,800	15,560	1,180	-780	400
Morgan	31,280	21,960	9,320	1,680	11,000
Newton	10,970	6,810	4,230	2,870	7,100
Noble	24,290	14,910	9,480	720	10,200
Ohio	3,210	2,230	950	750	1,700
Orange	10,580	9,310	1,260	840	2,100
Owen	9,550	7,650	1,790	3,910	5,700
Parke	8,240	8,080	250	1,250	1,500
Perry	11,470	8,950	2,470	1,870	600
Pike	7,640	6,820	770	1,130	1,900
Porter	85,830	49,590	36,270	34,830	71,100
Posey	17,360	11,560	5,870	3,930	9,800
Pulaski	8,710	6,230	2,420	-720	1,700
Putnam	13,950	12,230	1,640	-1,040	600
Randolph	15,940	12,880	3,070	-1,670	1,400
Ripley	16,790	11,080	5,620	1,180	6,800
Rush	10,100	8,470	1,570	-3,370	-1,800
St. Joseph	127,140	100,600	26,550	31,450	-4,900
Scott	11,500	9,370	2,050	1,250	3,300
Shelby	21,470	16,610	4,710	-2,210	2,500
Spencer	11,640	8,630	3,110	1,490	4,600
Starke	14,170	11,030	3,150	950	4,100
Steuben	14,940	11,900	3,050	4,150	7,200
Sullivan	11,290	11,020	330	870	1,200
Switzerland	4,380	3,300	1,110	490	1,600
Tippecanoe	63,010	35,800	27,120	-14,120	13,000
Tipton	8,430	7,100	1,240	-1,640	-400
Union	3,960	2,820	1,040	-440	600
Vanderburgh	82,770	77,050	5,640	-13,740	-8,100
Vermillion	8,820	8,990	-150	1,050	900
Vigo	48,580	47,970	560	-10,860	-10,300
Wabash	19,540	15,370	4,100	-2,800	1,300
Warren	4,270	3,790	520	-620	-100
Warrick	30,700	18,460	12,220	16,680	28,900
Washington	13,590	9,670	3,920	980	4,900
Wayne	38,070	32,080	5,910	-12,010	-6,100
Wells	15,670	9,860	5,730	-930	4,800
White	14,070	12,100	2,120	1,180	3,300
Whitley	15,350	11,210	4,160	40	4,200
Indiana	3,182,000	2,271,870	910,310	-301,360	608,700

Detail may not add to 100 because of rounding.

"In Table 7 the percentage distribution by age in each county is reported along with the median age for the years 1980 and 2020."

Table 7
Age Distribution in Indiana Counties
As a Percent of Population in County:

County	0-19		20-39		40-64		64 and Older		Median age	
	1980	2020	1980	2020	1980	2020	1980	2020	1980	2020
Adams	37.5	32.3	29.2	27.8	22.3	26.7	11.2	13.0	29.7	32.5
Allen	34.2	25.3	32.8	26.9	23.5	31.8	9.5	16.0	28.6	38.4
Bartholomew	34.4	20.9	32.1	24.5	24.6	34.8	8.9	19.9	29.5	43.8
Benton	33.3	27.4	25.8	26.8	25.9	26.7	14.6	19.3	31.8	37.0
Blackford	33.5	24.9	28.3	28.1	26.0	30.5	12.6	17.1	31.3	38.1
Boone	33.4	24.9	30.4	25.9	25.0	31.3	11.4	18.1	31.0	39.5
Brown	32.1	16.9	31.4	22.1	25.9	38.5	10.7	22.6	31.2	47.9
Carroll	32.7	24.2	28.5	24.6	26.0	31.6	12.8	19.6	31.2	41.0
Cass	32.5	25.8	28.9	26.5	26.5	31.5	12.2	16.5	31.2	38.4
Clark	34.2	21.8	32.8	25.5	24.0	35.7	8.9	17.0	28.9	42.0
Clay	31.2	26.3	27.5	26.9	25.8	30.8	15.5	16.3	32.6	37.8
Clinton	32.3	26.1	28.3	26.5	25.3	31.0	14.2	16.6	31.4	38.2
Crawford	34.4	24.4	28.6	26.2	24.0	33.8	13.5	15.8	30.0	39.6
Daviess	33.3	27.7	27.5	27.2	25.2	28.7	14.2	16.1	31.1	36.4
Dearborn	35.4	26.1	29.0	26.3	24.9	31.2	10.8	16.2	29.5	38.0
Decatur	35.5	26.5	28.8	26.7	23.7	31.1	12.2	15.9	29.1	37.6
Dekalb	35.3	26.5	30.3	26.2	23.3	31.6	11.1	15.7	29.0	37.9
Delaware	33.2	27.8	33.3	34.7	23.5	25.2	10.0	12.4	27.8	30.2
Dubois	35.4	24.9	30.5	26.4	23.0	31.7	11.4	17.2	28.1	39.0
Elkhart	34.2	25.5	32.2	26.4	24.0	31.2	9.6	16.8	29.0	38.6
Fayette	34.8	25.1	29.2	26.1	25.4	31.7	11.1	17.0	29.6	39.0
Floyd	33.0	23.2	31.1	25.8	24.9	32.8	11.0	18.0	30.3	40.7
Fountain	32.4	23.4	27.8	25.4	26.6	31.8	13.4	18.9	32.1	40.7
Franklin	37.7	26.3	28.6	26.2	22.9	31.1	10.8	16.2	28.0	37.9
Fulton	31.9	26.1	27.2	26.2	26.8	30.7	14.4	17.1	32.4	38.3
Gibson	31.2	24.2	28.5	26.2	25.9	32.9	14.3	16.9	31.8	39.8
Grant	33.8	22.9	29.3	26.9	26.4	32.8	10.6	17.5	29.8	40.2
Greene	30.8	24.3	27.3	25.5	26.0	32.1	16.1	18.2	33.6	40.2
Hamilton	35.5	22.6	31.9	24.1	25.3	33.4	7.4	20.0	30.1	42.7
Hancock	36.2	21.9	30.8	25.0	24.9	34.5	8.3	18.7	29.8	42.4
Harrison	35.3	25.8	31.0	26.2	23.6	32.6	10.1	15.5	29.0	38.5
Hendricks	35.7	21.6	32.3	24.1	24.3	34.2	7.7	20.0	29.4	43.3
Henry	33.5	22.4	29.0	25.7	25.4	33.0	12.0	18.8	30.9	41.4
Howard	34.6	24.6	31.0	26.4	25.5	31.9	8.9	17.1	29.4	39.2
Huntington	33.5	26.8	29.0	26.8	24.3	30.5	13.3	15.6	29.9	37.3
Jackson	33.4	25.5	29.7	26.3	24.5	31.4	12.5	16.8	30.2	38.6
Jasper	37.2	26.7	30.7	27.3	22.4	31.2	9.8	15.1	27.0	37.0
Jay	33.7	26.7	27.4	27.3	25.5	29.8	13.2	15.9	31.1	37.0
Jefferson	33.7	22.0	31.2	26.1	24.0	25.6	11.3	16.2	29.4	41.3
Jennings	35.6	22.2	31.8	25.2	22.6	35.1	9.8	17.6	28.5	42.0
Johnson	35.7	22.4	32.4	25.7	23.3	33.7	8.7	18.2	28.7	41.5
Knox	31.4	23.9	28.2	27.4	25.1	32.1	15.2	16.6	31.5	39.0
Kosciusko	33.7	27.4	32.0	26.6	23.7	31.0	10.5	15.0	29.1	37.0
Lagrange	40.7	34.4	28.5	27.8	21.6	25.7	9.5	10.0	26.0	30.4
Lake	35.2	28.6	30.3	28.2	25.7	28.7	8.8	14.4	28.3	35.4
LaPorte	33.0	24.3	31.0	26.1	25.3	32.9	10.7	16.6	29.9	39.6
Lawrence	32.3	22.5	28.8	25.3	26.0	33.9	12.8	18.4	31.6	41.7
Madison	33.3	23.3	30.3	26.4	25.4	32.9	10.9	17.3	30.2	40.2
Marion	31.9	24.2	33.1	27.4	24.7	32.4	10.4	16.0	29.2	39.0
Marshall	33.7	27.0	28.9	26.7	24.8	30.2	12.4	16.1	30.1	37.2
Martin	35.0	26.2	29.2	26.3	25.1	30.0	10.9	17.6	29.5	38.3
Miami	35.1	26.4	32.3	26.4	22.5	32.4	9.9	14.8	27.9	37.9
Monroe	30.5	29.1	44.2	42.6	18.1	19.0	7.2	9.3	24.7	25.2
Montgomery	32.1	21.6	29.4	24.9	25.6	34.0	13.1	19.5	31.1	42.8
Morgan	36.3	23.9	30.5	25.4	24.6	32.0	8.7	18.6	29.0	40.5
Newton	36.1	26.3	29.5	26.2	23.2	31.6	11.9	15.9	29.1	38.1

(Table 7, Age Distribution, continued)

County	0-19		20-39		40-64		64 and Older		Median Age	
	1980	2020	1980	2020	1980	2020	1980	2020	1980	2020
Noble	34.9	26.6	30.5	26.3	24.0	31.2	10.8	15.7	29.0	37.7
Ohio	33.1	24.0	28.4	25.4	25.7	32.5	13.5	18.8	31.3	40.9
Orange	32.2	25.2	28.3	26.0	25.3	31.9	14.0	16.7	31.5	39.0
Owen	33.3	21.7	27.4	24.4	25.4	34.0	13.6	20.1	31.8	43.3
Parke	32.1	22.5	27.2	24.3	26.1	33.7	15.1	19.7	32.8	42.8
Perry	33.5	28.0	28.4	27.4	25.2	28.1	13.3	16.5	30.3	36.1
Pike	30.8	24.0	27.7	26.2	25.9	32.4	15.5	17.5	33.2	39.9
Porter	36.0	22.4	34.6	25.4	22.6	35.6	6.9	16.6	27.2	41.7
Posey	34.2	23.9	31.7	26.1	23.5	33.2	10.7	16.6	29.2	39.9
Pulaski	34.4	29.8	26.9	27.0	25.0	27.7	14.4	15.8	30.4	35.3
Putnam	32.7	20.9	30.2	26.7	24.8	34.4	12.3	17.9	29.5	42.0
Randolph	33.6	23.8	28.5	25.8	25.7	32.3	12.2	17.8	30.9	40.2
Ripley	35.3	27.7	28.0	26.2	23.8	30.6	13.1	15.8	29.6	37.0
Rush	35.1	26.8	26.9	27.2	24.9	29.1	13.1	16.9	30.0	37.1
St. Joseph	31.7	24.1	31.2	27.5	25.1	32.0	12.1	16.4	29.9	38.9
Scott	36.3	22.6	29.4	24.8	23.3	34.8	10.7	17.7	28.5	41.9
Shelby	34.3	23.8	29.6	25.5	25.0	32.1	11.0	18.6	29.9	40.5
Spencer	33.6	24.8	29.6	24.9	23.8	32.0	13.3	18.1	29.9	40.2
Starke	35.5	26.7	27.8	26.8	23.8	30.5	13.0	16.0	29.7	37.3
Steuben	32.7	22.9	30.3	25.1	24.9	33.9	12.2	18.0	30.1	41.5
Sullivan	30.6	24.5	27.3	26.1	25.9	32.2	16.5	17.0	33.7	39.4
Switzerland	33.5	25.6	26.3	25.9	26.5	30.9	14.9	18.0	32.7	39.0
Tippecanoe	32.0	27.0	40.8	39.7	19.1	22.1	8.2	11.2	24.7	27.3
Tipton	33.0	23.6	29.2	25.8	25.9	31.7	12.1	19.2	31.3	40.6
Union	34.6	25.9	28.3	26.5	24.3	30.3	12.2	17.7	30.1	38.4
Vanderburgh	29.4	23.0	30.8	26.5	26.1	32.8	13.7	17.7	31.5	40.4
Vermillion	31.0	21.4	28.2	25.1	25.3	34.4	15.8	18.9	33.0	42.6
Vigo	30.7	25.1	32.4	31.7	23.9	29.1	13.1	14.0	29.4	34.8
Wabash	34.1	23.4	29.7	27.0	24.3	32.7	12.0	16.9	29.4	39.7
Warren	34.2	23.0	28.0	24.7	26.5	31.6	12.4	20.7	31.3	41.7
Warrick	35.7	22.9	32.5	24.7	23.2	34.8	8.6	17.6	29.1	41.8
Washington	34.8	24.8	28.6	26.4	24.0	32.2	12.3	16.5	29.8	39.1
Wayne	32.8	24.4	28.4	27.2	26.1	30.9	12.6	17.4	31.2	38.8
Wells	34.2	25.2	30.4	26.3	24.1	30.7	11.3	17.9	29.6	38.9
White	32.5	25.6	28.4	25.8	25.8	31.7	13.6	17.0	31.5	38.9
Whitley	34.1	24.6	29.9	25.6	24.6	31.7	11.5	18.0	29.8	39.8
Indiana	33.4	24.9	31.4	23.3	24.5	31.4	10.7	16.3	29.2	38.3

Detail may not add to 100 because of rounding.

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